

WHAT IS CLAIMED IS:

1. ~~A printing system comprising a computer and a printer,~~

wherein said computer includes a plurality of printer drivers provided for different emulations, respectively, said computer comparing an environment of said computer and an environment of said printer to select one of said printer drivers based on a result of the comparison, said computer processing image data by said selected one of said printer drivers and sending the processed image data to said printer, and

wherein said printer receives the processed image data from said computer and processes the received image data according to one of said emulations corresponding to said selected one of said printer drivers to implement printing.

2. The printing system according to claim 1, wherein the environments of said computer and said printer include a size of the image data, a free memory size of said computer for storing therein the image data, and a free memory size of said printer for storing therein the image data.

3. ~~The printing system according to claim 1, wherein the environments of~~
said computer and said printer include a size of the image data, a free memory size of said printer for storing therein the image data, a data transfer speed from said computer to said printer, and a paper feed speed of said printer.

4. The printing system according to claim 1, wherein the environments of said computer and said printer include a drawing speed of said computer upon drawing the image data, and a drawing speed of said printer upon drawing the

image data.

5. The printing system according to claim 1, wherein the environments of said computer and said printer include an evaluation size of an intermediate metafile of the image data in said computer, and a free memory size of said printer for storing therein the image data.
6. A printing system comprising a computer and a printer, said computer including a plurality of printer drivers provided for different emulations, respectively, said computer further including a computer environment determining section which determines an environment of said computer and a printer environment determining section which determines an environment of said printer based on information sent from said printer, said computer further including a printer driver selecting section which compares the environments of said computer and said printer to select one of said printer drivers based on a result of the comparison, so that image data is processed by said selected one of said printer drivers and sent to said printer, and said printer including a printer environment measuring section which measures an environment of said printer and notifies it as said information to said printer environment determining section of the computer, said printer further including an emulation judging section which judges one of said emulations corresponding to said selected one of said printer drivers, and an emulation section which processes said image data according to said judged one of said emulations for printing.
7. The printing system according to claim 6, wherein said computer environment determining section comprises a computer free memory size

8. The printing system according to claim 7, wherein the number of said printer drivers is at least two, wherein according to one of said printer drivers, the printing system is controlled such that one-page image data is sent from the computer to the printer, then the printer implements bit-mapping of the received image data for printing, and wherein according to the other printer driver, the printing system is controlled such that bit-mapped image data is sent from the computer to the printer which implements printing in parallel with receiving the bit-mapped image data from the computer.

9. The printing system according to claim 6, wherein said computer environment determining section comprises a computer data transfer speed determining section which determines a data transfer speed when the image data is transferred from said computer to said printer, and said printer environment determining section comprises a printer free memory size determining section which determines a free memory size of said printer based

on the information sent from said printer, wherein said printer driver selecting section makes a comparison based on a size of the image data, the free memory size of said printer and said data transfer speed to select one of said printer drivers based on the result of the comparison, and wherein said printer environment measuring section comprises a printer free memory size measuring section which measures a free memory size of said printer for storing therein the image data and notifies it as said information to said printer free memory size determining section of the computer.

10. The printing system according to claim 9, wherein the number of said printer drivers is at least two, wherein according to one of said printer drivers, the printing system is controlled such that one-page image data is sent from the computer to the printer, then the printer implements bit-mapping of the received image data for printing, and wherein according to the other printer driver, the printing system is controlled such that bit-mapped image data is sent from the computer to the printer which implements printing in parallel with receiving the bit-mapped image data from the computer.

11. The printing system according to claim 6, wherein said computer environment determining section comprises a computer drawing capability determining section which determines a drawing speed of said computer upon drawing the image data, and said printer environment determining section comprises a printer drawing capability determining section which determines a drawing speed of said printer based on the information sent from said printer, wherein said printer driver selecting section compares the drawing speed of said computer and the drawing speed of said printer to select one of said printer drivers based on the result of the comparison, and wherein said printer

~~environment measuring section comprises a printer drawing speed measuring~~
section which measures a drawing speed of said printer upon drawing the
image data and notifies it as said information to said printer drawing
capability determining section of the computer.

12. The printing system according to claim 11, wherein the number of said
printer drivers is at least two, wherein according to one of said printer drivers,
the printing system is controlled such that one-page image data is sent from
the computer to the printer, then the printer implements bit-mapping of the
received image data for printing, and wherein according to the other printer
driver, the printing system is controlled such that bit-mapped image data is
sent from the computer to the printer which implements printing in parallel
with receiving the bit-mapped image data from the computer.

13. The printing system according to claim 6, wherein said computer
environment determining section comprises an intermediate metafile
analyzing section which derives an evaluation size of an intermediate metafile
of the image data, and said printer environment determining section comprises
a printer free memory size determining section which determines a free
memory size of said printer based on the information sent from said printer,
wherein said printer driver selecting section compares the evaluation size of
said intermediate metafile and the free memory size of said printer to select
one of said printer drivers based on the result of the comparison, and wherein
said printer environment measuring section comprises a printer free memory
size measuring section which measures a free memory size of said printer for
storing therein the image data and notifies it as said information to said
printer free memory size determining section of the computer.

all B1